

REMARKS

Status of the claims

Claims 12 and 16-19 are pending. Claims 1-11 and 13-15 were previously canceled. Claims 12 and 18-19 are amended. No new matter is added.

Amendments to the claims and to the specification

Applicants have amended claims 12 and 18 and the title of the specification as shown *supra* and discussed *infra* to overcome a rejection under 35 U.S.C 112, second paragraph.

The 35 U.S.C. 112, second paragraph, rejections

Claims 12 and 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite

1. The preamble in claim 12 is directed to determining a cysteine deficiency but there is no step to accomplish the preamble. Applicant has amended claim 12 to recite that if ratio of lymphocyte growth response from an individual of interest to an average control is greater than or equal to about 127%, the individual of interest has a cysteine deficiency instead of a

glutathione deficiency. This was an unintentional error. Applicant submits that the method steps detailed in claim 12 determine and compare the ratios of growth response of lymphocytes in an n-acetyl-L-cysteine medium to n-acetyl-L-cysteine negative medium in the individual of interest with that of a control. The specification defines a cysteine deficiency as being greater than or equal to 127% of control (pg. 30, ll. 14 to pg. 31, ll. 2).

2. In claim 18 "said vitamins" lacks definite antecedent basis. Applicant has amended claim 18 to recite "said vitamin" as the recitation in claim 12 is to "a vitamin".

3. Claim 19 is not understood in context where no response is seen. Claim 19 is amended to clarify that the maximal response is a growth response. Claim 19 depends from amended claim 12. As claim 12 is amended to recite the step of comparing lymphocyte growth response with or without cysteine in the medium to determine if a cysteine deficiency is present as discussed *supra*, the limitation in claim 19 to provide supplements at an amount to induce a maximal growth response is a proper limitation within the context of amended claim 1.

4. The title of the invention is not aptly descriptive. Applicants have amended the title as shown *supra*. The title is now

"Methods of Determining Deficiencies in Intracellular Levels of Cysteine and Glutathione".

Accordingly, in view of the claim amendments and remarks presented herein, Applicant respectfully requests that the rejection of claims 12 and 16-19 under 35 U.S.C. 112, second paragraph, be withdrawn.

This is intended to be a complete Response to the Office Action mailed May 7, 2003. If any issues regarding the instant claim amendments remain outstanding, the Examiner is respectfully requested to telephone the undersigned attorney of record for immediate resolution. Applicants believe that no fees are due, however, should this be in error, please debit any applicable fees from Deposit Account No. 07-1185 on which the undersigned is allowed to draw.